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PREFACE

This annual index of Mathematical Reviews is included with each subscription and is also available separately. It is also called Vol. 18 of the Index of Mathematical Papers (IMP). Vols. 6–9 of IMP are the annual indexes of MR for the years 1974–77, and are available as a set. The 1978 annual index was the first to be included with each subscription. There are cumulative author indexes to MR that cover 1940–59 (vols. 1–20), 1960–64 (vols. 21–28) and 1965–72 (vols. 29–44), subject indexes for 1940–58 (vols. 1–19) and 1959–72 (vols. 20–44), and author and subject indexes for 1973–79 (vols. 45–58) and 1980–84.

The classification scheme used in the present index is the 1980 Mathematics Subject Classification (1985 Revision). A copy of the revised version is printed in the back of the subject portion of this index.

The entries in the author and key indexes give full bibliographic information about all items reviewed in MR. These entries are accompanied by MR numbers and classification numbers; secondary classification numbers are given in parentheses. In the subject index, an item listed under its secondary classification has the MR number given in parentheses. A star (★) preceding a title indicates a book, or other item which is not a periodical, that is reviewed as a whole.

Author index; separate key index

Reviewed items are listed alphabetically by author; items having several authors are listed in full under each author (this was not done in the 1940–72 cumulative indexes). Surnames consisting of more than one part (e.g., de Branges, van der Corput) are listed under the first capital letter. Collections of papers, proceedings, bibliographies, tables, etc. that are edited rather than authored are listed in the key index by title and by "key entry". For example, the publication entitled *Algebraic geometry* is also listed under Conference: Algebraic geometry, and under the place and date of the conference. Some collections only have key entries. For example, the publication entitled *Operations research proceedings 1980* is also listed under Proceedings: Operations research, under Meeting: Deutsche Gesellschaft für Operations Research, and under the place and date of the meeting. Some monographic series (e.g. Amer. Math. Soc. Transl. (2)) have entries under the series title in this index.

Cross-references.

There are three kinds of cross-references in these indexes.

(a) *Name variations.*

An author's primary name is the variation of the name which MR has chosen on the basis of frequency and currency of usage. We usually list all items by a given author under that author's primary name, and cross-references to the primary form are given from sufficiently distinct alternative forms of the author's name that have been used in items reviewed.

(b) *Authors in other capacities.*

In the author index, the names of persons associated with an item in a capacity other than that of author (e.g., editor, translator, subject of a biography, etc.) are also listed. In the subject index, such names are given in parentheses in the positions that they would occupy had they been authors. In both indexes these items occur only as cross-references to complete listings.

(c) *Key entries.*

Cross-references for such entries as bibliographies, obituaries and references to special events are made to the authors of the papers in which these items appear, e.g. Bibliography: Einstein, Albert *See* Pais, Abraham, 84j:01072.

Arrangement of entry

The full entries under a given heading (i.e., the primary name of an author, or a title) are listed in order of nominal publication dates; the cross-references are in MR number order after the full entries. For this purpose coauthored items are treated on the same basis as those written by the author alone.

The arrangement of each entry is the same as the heading of the review in MR. All titles not in English are given in English translation (with the language of the original following in parentheses and accompanied by the mention of the summaries in other languages). Book and monograph titles in languages other than English are given in the original language or in a transliteration from the

original; the title is then followed by the language of the original, in parentheses, and an English translation of the title, in brackets.

The general form for entries is as follows:

Books, Monographs: Title. (Language of original {if necessary}) [English translation of title {if necessary}] Miscellaneous information {edition, editors, translators, series, etc.}. Publisher, city, date. Pagination. (Reviewer's name) Review number.

Journal article: Title of article. (Language of original {if necessary}. Summaries in languages other than the original {if necessary}) Journal abbreviation {including series number if necessary} volume number(volume number in first series if given) (nominal date), issue number {if necessary}, first page–last page (imprint date). (Reviewer's name) Review number.

The first part of the review number refers to the issue in which the review was published and the second part refers to its position within the issue. The first two digits after the colon are the general subject classification.

Transliteration

Since 1983, MR has used the Cyrillic transliteration in use by ANSI, LC, Zbl, ISI, and others. This is also the system used throughout this index for all items, including those reviewed in 1980–82. A table showing the details appears at the end of the author/key index.

Names of Chinese authors

The name of a Chinese author appears in the index in Western form. For example, Hua Luogeng will be listed as Hua, Luo Geng, as though the author's name were L. G. Hua. The pinyin transliteration is used for mainland Chinese authors and the Wade-Giles transliteration is used for Taiwanese authors.

Conclusion

In an undertaking of this size errors are inevitable, despite elaborate precautions and checks. The editors of Mathematical Reviews would be very glad to have their attention drawn to errors in this index and also in the earlier indexes.

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Aaberge, Rolf (*with* Laake, Petter; Laake, Knut) On the problem of measuring the distance between distribution functions: analysis of hospitalization versus mortality. (French summary) *Biometrics* **41** (1985), *no.* 2, 515–523. (Not in MR) 62P10

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(*with* Monteiro, Luiz) On three-valued Moisil algebras. *Logique et Anal.* (*N.S.*) **27** (1984), *no.* 108, 407–414. (Vlad Boicescu) **86i:06018** 06D30 (03B50, 03G20)

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Abad, P. L. Two-level algorithm for decentralized control of a serially connected dynamic system. *Internat. J. Systems Sci.* **16** (1985), *no.* 5, 619–624. (Summary) **86k:93002** 93A15 (93B40)

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Abbasov, A. A. Some qualitative properties of solutions of a mixed problem for degenerate elliptic equations in nonsmooth domains. (Russian. English and Azerbaijani summaries) *Izv. Akad. Nauk Azerbaĭdzhan. SSR Ser. Fiz.-Tekhn. Mat. Nauk* **4** (1983), *no.* 4, 20–26. (From the introduction) **86m:35069** 35J70 (35B65)

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(*with* Manià, A.) Quantum logic and operational quantum mechanics. *Rep. Math. Phys.* **19** (1984), *no.* 3, 383–406. (S. Gudder) **86f:81011** 81B10 (46A06, 46L60)

(*with* Manià, A.) The G-central decomposition of states of statistical systems in the algebraic and in the operational description. *Rep. Math. Phys.* **21** (1985), *no.* 3, 291–307. (P. J. Stacey) **86m:46059** 46L45 (46A55, 82A15)

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Abbott, H. L. (*with* Meir, A.) An extremal problem in combinatorial number theory. *Studies in pure mathematics,* 17–20, *Birkhäuser, Basel-Boston, Mass.,* 1983. (S. Stein) **86m:11008** 11A67 (05B10)

Abbott, Richard B. (*with* Ellis, Stephen D.; Barr, Stephen M.) Kaluza-Klein cosmologies and inflation. II. *Phys. Rev. D* (3) **31** (1985), *no.* 4, 673–680. (Summary) **86d:83061** 83F05 (83E15)

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